

## STIC Biotechnology Systems Branch

### RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/549,796  
Source: PCP/10  
Date Processed by STIC: 10/4/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

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## Raw Sequence Listing Error Summary

**ERROR DETECTED****SUGGESTED CORRECTION**SERIAL NUMBER: 10/549,796**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

1  Wrapped Nucleic  
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2  Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

3  Misaligned Amino  
Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4  Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5  Variable Length Sequence(s) \_\_\_\_\_ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6  PatentIn 2.0  
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7  Skipped Sequences  
(OLD RULES) Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8  Skipped Sequences  
(NEW RULES) Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence.  
<10> sequence id number  
<400> sequence id number  
000

9  Use of n's or Xaa's  
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10  Invalid <213>  
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11  Use of <220>  
→ Sequence(s) \_\_\_\_\_ missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12  PatentIn 2.0  
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13  Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

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PCT

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
TIME: 10:16:05

Input Set : A:\12987\_54.txt  
Output Set: N:\CRF4\10042005\J549796.raw

3 <110> APPLICANT: Enobia Pharma Inc.  
 4 Guy Boileau  
 5 Adriana Karaoglanovic Carmona  
 6 Marcelo Campos  
 7 Maria Aparecida Juliano  
 8 Luiz Juliano  
 10 <120> TITLE OF INVENTION: PHEX SUBSTRATES AND METHODS USING SAME  
 11 <130> FILE REFERENCE: 12987.54  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/549,796  
 C--> 14 <141> CURRENT FILING DATE: 2005-09-19  
 16 <160> NUMBER OF SEQ ID NOS: 32  
 18 <170> SOFTWARE: PatentIn version 3.2  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 7  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: Artificial  
 25 <220> FEATURE:  
 26 <223> OTHER INFORMATION: Peptide  
 28 <400> SEQUENCE: 1  
 30 Ala Trp Leu Asp Ser Gly Val  
 31 1 5  
 34 <210> SEQ ID NO: 2  
 35 <211> LENGTH: 4  
 36 <212> TYPE: PRT  
 37 <213> ORGANISM: Artificial  
 39 <220> FEATURE:  
 40 <223> OTHER INFORMATION: Peptide  
 42 <400> SEQUENCE: 2  
 44 Phe Ser Asp Tyr  
 45 1  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 6  
 50 <212> TYPE: PRT  
 51 <213> ORGANISM: Artificial  
 53 <220> FEATURE:  
 54 <223> OTHER INFORMATION: peptide  
 56 <400> SEQUENCE: 3  
 58 Gly Phe Ser Asp Tyr Lys  
 59 1 5  
 62 <210> SEQ ID NO: 4  
 63 <211> LENGTH: 6  
 64 <212> TYPE: PRT  
 65 <213> ORGANISM: Artificial

*Insufficient explanation  
qui source of  
genetic material  
(see item 11 on Error  
Summary Sheet)*

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
TIME: 10:16:05

Input Set : A:\12987\_54.txt  
Output Set: N:\CRF4\10042005\J549796.raw

67 <220> FEATURE:  
68 <223> OTHER INFORMATION: peptide  
71 <220> FEATURE:  
72 <221> NAME/KEY: misc\_feature  
73 <222> LOCATION: (2)..(5)  
74 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine  
77 <400> SEQUENCE: 4  
W--> 79 Gly Xaa Xaa Xaa Lys  
80 1 5  
83 <210> SEQ ID NO: 5  
84 <211> LENGTH: 6  
85 <212> TYPE: PRT  
86 <213> ORGANISM: Artificial  
88 <220> FEATURE:  
89 <223> OTHER INFORMATION: peptide  
92 <220> FEATURE:  
93 <221> NAME/KEY: MISC\_FEATURE  
94 <222> LOCATION: (2)..(3)  
95 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine,  
96 aspartate and glutamate  
98 <220> FEATURE:  
99 <221> NAME/KEY: MISC\_FEATURE  
100 <222> LOCATION: (5)..(5)  
101 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine  
103 <400> SEQUENCE: 5  
W--> 105 Gly Xaa Xaa Asp Xaa Lys  
106 1 5  
109 <210> SEQ ID NO: 6  
110 <211> LENGTH: 6  
111 <212> TYPE: PRT  
112 <213> ORGANISM: Artificial  
114 <220> FEATURE:  
115 <223> OTHER INFORMATION: peptide  
118 <220> FEATURE:  
119 <221> NAME/KEY: MISC\_FEATURE  
120 <222> LOCATION: (2)..(2)  
121 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine,  
122 aspartate and glutamate  
124 <220> FEATURE:  
125 <221> NAME/KEY: MISC\_FEATURE  
126 <222> LOCATION: (3)..(3)  
127 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine  
129 <220> FEATURE:  
130 <221> NAME/KEY: MISC\_FEATURE  
131 <222> LOCATION: (5)..(5)  
132 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine,  
133 aspartate and glutamate  
135 <400> SEQUENCE: 6

W--> 137 Gly Xaa Xaa Asp Xaa Lys

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
TIME: 10:16:05

Input Set : A:\12987\_54.txt  
Output Set: N:\CRF4\10042005\J549796.raw

138 1 5  
 141 <210> SEQ ID NO: 7  
 142 <211> LENGTH: 6  
 143 <212> TYPE: PRT  
 144 <213> ORGANISM: Artificial  
 146 <220> FEATURE:  
 147 <223> OTHER INFORMATION: peptide (2)  
 150 <220> FEATURE:  
 151 <221> NAME/KEY: MISC\_FEATURE  
 152 <222> LOCATION: (2)..(2)  
 153 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine  
 155 <220> FEATURE:  
 156 <221> NAME/KEY: MISC\_FEATURE  
 157 <222> LOCATION: (3)..(3)  
 158 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine,  
 159 aspartate and glutamate  
 161 <220> FEATURE:  
 162 <221> NAME/KEY: MISC\_FEATURE  
 163 <222> LOCATION: (5)..(5)  
 164 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine,  
 165 aspartate and glutamate  
 167 <400> SEQUENCE: 7  
 W--> 169 Gly Xaa Xaa Asp Xaa Lys  
 170 1 5  
 173 <210> SEQ ID NO: 8  
 174 <211> LENGTH: 4  
 175 <212> TYPE: PRT  
 176 <213> ORGANISM: Artificial  
 178 <220> FEATURE:  
 179 <223> OTHER INFORMATION: peptide (2)  
 181 <400> SEQUENCE: 8  
 183 Asp Arg Arg Leu  
 184 1  
 187 <210> SEQ ID NO: 9  
 188 <211> LENGTH: 4  
 189 <212> TYPE: PRT  
 190 <213> ORGANISM: Artificial  
 192 <220> FEATURE:  
 193 <223> OTHER INFORMATION: peptide (2)  
 195 <400> SEQUENCE: 9  
 197 Arg His Thr Arg  
 198 1  
 201 <210> SEQ ID NO: 10  
 202 <211> LENGTH: 6  
 203 <212> TYPE: PRT  
 204 <213> ORGANISM: Artificial  
 206 <220> FEATURE:  
 207 <223> OTHER INFORMATION: peptide (2)  
 210 <220> FEATURE:

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
TIME: 10:16:05

Input Set : A:\12987\_54.txt  
Output Set: N:\CRF4\10042005\J549796.raw

211 <221> NAME/KEY: misc\_feature  
212 <222> LOCATION: (2)..(3)  
213 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
215 <220> FEATURE:  
216 <221> NAME/KEY: misc\_feature  
217 <222> LOCATION: (5)..(5)  
218 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
220 <400> SEQUENCE: 10  
W--> 222 Gly Xaa Xaa Asp Xaa Lys  
223 1 5  
226 <210> SEQ ID NO: 11  
227 <211> LENGTH: 6  
228 <212> TYPE: PRT  
229 <213> ORGANISM: Artificial  
231 <220> FEATURE:  
232 <223> OTHER INFORMATION: peptide  
235 <220> FEATURE:  
236 <221> NAME/KEY: misc\_feature  
237 <222> LOCATION: (2)..(3)  
238 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
240 <220> FEATURE:  
241 <221> NAME/KEY: misc\_feature  
242 <222> LOCATION: (5)..(5)  
243 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
245 <400> SEQUENCE: 11  
W--> 247 Gly Xaa Xaa Glu Xaa Lys  
248 1 5  
251 <210> SEQ ID NO: 12  
252 <211> LENGTH: 6  
253 <212> TYPE: PRT  
254 <213> ORGANISM: Artificial  
256 <220> FEATURE:  
257 <223> OTHER INFORMATION: peptide  
259 <400> SEQUENCE: 12  
261 Gly Phe Ser Glu Tyr Lys  
262 1 5  
265 <210> SEQ ID NO: 13  
266 <211> LENGTH: 6  
267 <212> TYPE: PRT  
268 <213> ORGANISM: Artificial  
270 <220> FEATURE:  
271 <223> OTHER INFORMATION: peptide  
273 <400> SEQUENCE: 13  
275 Gly Phe Ser Asp Tyr Gln  
276 1 5  
279 <210> SEQ ID NO: 14  
280 <211> LENGTH: 9  
281 <212> TYPE: PRT  
282 <213> ORGANISM: Artificial

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
TIME: 10:16:05

Input Set : A:\12987\_54.txt  
Output Set: N:\CRF4\10042005\J549796.raw

```

284 <220> FEATURE:
285 <223> OTHER INFORMATION: peptide
287 <400> SEQUENCE: 14
289 Asp His Leu Ser Asp Thr Ser Thr Gln
290 1 5
293 <210> SEQ ID NO: 15
294 <211> LENGTH: 7
295 <212> TYPE: PRT
296 <213> ORGANISM: Artificial
298 <220> FEATURE:
299 <223> OTHER INFORMATION: peptide
301 <400> SEQUENCE: 15
303 Leu Glu Leu Asp Ser Arg Gln
304 1 5
307 <210> SEQ ID NO: 16
308 <211> LENGTH: 8
309 <212> TYPE: PRT
310 <213> ORGANISM: Artificial
312 <220> FEATURE:
313 <223> OTHER INFORMATION: peptide
315 <400> SEQUENCE: 16
317 Ala Trp Leu Asp Ser Gly Val Gln
318 1 5
321 <210> SEQ ID NO: 17
322 <211> LENGTH: 14
323 <212> TYPE: PRT
324 <213> ORGANISM: Artificial
326 <220> FEATURE:
327 <223> OTHER INFORMATION: peptide
329 <400> SEQUENCE: 17
331 Arg Arg His Thr Arg Ser Ala Glu Asp Asp Ser Glu Arg Gln
332 1 5 10
335 <210> SEQ ID NO: 18
336 <211> LENGTH: 8
337 <212> TYPE: PRT
338 <213> ORGANISM: Artificial
340 <220> FEATURE:
341 <223> OTHER INFORMATION: peptide
343 <400> SEQUENCE: 18
345 Leu Met Met Asp Phe Arg Gly Gln
346 1 5
349 <210> SEQ ID NO: 19
350 <211> LENGTH: 8
351 <212> TYPE: PRT
352 <213> ORGANISM: Artificial
354 <220> FEATURE:
355 <223> OTHER INFORMATION: peptide
357 <400> SEQUENCE: 19
359 Ser Ala Glu Asp Asn Ser Pro Gln

```

FYT  
  
 The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

global error

RAW SEQUENCE LISTING ERROR SUMMARY                   DATE: 10/04/2005  
PATENT APPLICATION: US/10/549,796                   TIME: 10:16:06

Input Set : A:\12987\_54.txt  
Output Set: N:\CRF4\10042005\J549796.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 2,3,4,5  
Seq#:5; Xaa Pos. 2,3,5  
Seq#:6; Xaa Pos. 2,3,5  
Seq#:7; Xaa Pos. 2,3,5  
Seq#:10; Xaa Pos. 2,3,5  
Seq#:11; Xaa Pos. 2,3,5

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27  
Seq#:28,29,30,31,32

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005

TIME: 10:16:06

Input Set : A:\12987\_54.txt

Output Set: N:\CRF4\10042005\J549796.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0

L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0

L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0

L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0

L:222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0

L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0